

July 17, 2015

Mr. Chris Royer Royer Architects 100 Garden Street Cambridge, MA 02138

Subject: 53 Josephine Avenue, Somerville, MA

Regarding: Existing Condition

Dear Mr. Royer:

At your request I visually observed the subject structure and its foundation walls at the subject address. The purpose of the review was to ascertain the structural condition of the building and determine its adequacy to support a three floor, timber framed multifamily residence.

The existing structure is a three story multifamily dwelling which has been seriously damaged by fire. The roof framing was a total loss and has already been removed. In addition, areas of the floor framing were damaged by the fire and are compromised. The remaining existing floor joists are undersized by current standards and would need to be reinforced or reframed if they were to remain in place. The firefighting activity in conjunction with the damaged roof has led to extensive water and mold damage throughout the building.

The lower section of the exterior foundation walls are composed of rubble stone which were mortared together. The upper section begins at or near grade level and is composed of red brick masonry. It was not possible to determine if the existing foundation walls were supported by proper strip footings based upon the visual observations. The mortar contained within the walls is in poor condition throughout most of the foundation. Many areas of mortar were missing at the lower stone section and the mortar was soft at several areas of the upper wall. Areas of the upper brick portion were visibly out of alignment and not plumb. No anchors were noted tying the timber framing into the foundation.

Based upon the visual observations it is my professional opinion that the structural integrity of the subject building is questionable at best. Much of the remaining timber structure needs to have mold mitigated and the existing framing either needs to be replaced or reinforced. The foundation walls have soft mortar and are in poor alignment. This not only affects the walls' capacity to support vertical loads, but also will make proper anchorage of the timber framing and shear walls to the foundation walls as required by current code standards extremely difficult. Taking all the above observation into consideration it is my recommendation that the existing structure and its foundation not be reused to rebuild the property. Due the extensive damage it is my professional opinion that the building and its foundation should be removed in its entirety.



Thank you for the opportunity to provide you with structural engineering services. If you have further questions regarding this matter, please call the undersigned at (508) 532-0876.

Sincerely,

Frank Lagodimos, PE